

5 COMPLEXES OF MID-TRANSITION METALS AND  
UNSATURATED NITROGENOUS LIGANDS AS SINGLE-SITE CATALYSTS

ABSTRACT OF THE DISCLOSURE

10 Novel compounds are provided which are useful as catalysts, particularly in the  
polymerization of addition polymerizable monomers such as olefinic or vinyl monomers. The  
compounds are complexes of a mid-transition metal coordinated to at least two ligands, at least  
one of which is an unsaturated nitrogenous ligand. Depending on ligand substitution,  
stereospecific catalysts can be provided, including isospecific catalysts and syndiospecific  
catalysts. Catalyst systems containing the novel compounds in combination with a catalyst  
15 activator are provided as well, as are methods of using the novel compounds in the preparation  
of polyolefins.

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